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10/685,582

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Christopher Townsend

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7161

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7590

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EXAMINER

KOSTAK, VICTOR R

ART UNIT

PAPER NUMBER

2622

NOTIFICATION DATE

DELIVERY MODE

06/25/2007

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTO-PAT-Email@rfem.com

**Office Action Summary**

Application No.

10/685,582

Applicant(s)

TOWNSEND ET AL.

Examiner

Victor R. Kostak

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05/04/07.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4 and 6-21 is/are rejected.
- 7) ☒ Claim(s) 3 and 5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 2 is now rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "brief" in claim 2 line 2 is a relative term which renders the claim indefinite. The term "brief" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

The amount of data typically allotted to displaying program scheduling information simultaneously for plural channels is limited, due the restricted amount of viewable area of the television screen for such simultaneous data. More informative extended descriptions are therefore prohibited. So already characterizing the data as "brief" goes without saying, the term being redundant and therefore unnecessary.

On the other hand, if applicant intended to characterize his schedule guide data as providing less than typical programming information, providing one of ordinary skill in the art with a measure as to what qualifies as "brief" beyond that which is generally accepted has not been given.

The term should probably just be removed to dismiss any ambiguity.

The examiner regrets not bringing this up in the last Office action.

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2. Applicant's arguments filed on 05/04/07, in light of the amendment, have been fully considered but they are not persuasive. The previous rejections accordingly still apply and are repeated as follows from the last Office action.

Applicant could have submitted an actual response regarding his alleged impermissible hindsight instead of a footnote to that effect.

Applicant's alternative to include amended claim language does not overcome the prior art (for the most part). The previous action accordingly still applies and is repeated below from the last Office action, with new text presented in **bold** to assist in distinguishing it from the repeated language.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2 and 16 **stand** rejected under 35 U.S.C. 103(a) as being unpatentable over Chaney (5,473,609) in view of Reiter (4,751,578 cited by applicant) or Young (5,353,121 cited by applicant).

As discussed in the last Office action, Fig. 1 of Chaney shows the transmitter side of a conventional digital TV signal transmission system. As shown, the transmitter comprises plural transmitting units (TRANSMIT #1 to TRANSMIT #N). Each of the transmitting units produce a single carrier signals (channel) having a plurality of digital TV broadcast services multiplexed therein (in the same manner as acknowledged by applicant as being known: lines 20-30 of his

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specification). All of the transmitting units are controlled by a single common SCHEDULER (as shown in Fig. 1). Fig. 2 shows details of a transmitting unit, which includes plural studios (STUDIO #1 – STUDIO #K), each which generates a TV data stream representing television programming. The SCHEDULER comprises circuitry for generating the control data required to implement the conditional access feature of the TV system (as shown in Fig. 2); a MASTER PROGRAM GUIDE stage which, under the control of the SCHEDULER, generates data representing a master electronic program guide (EPG); an optional SPECIAL PROGRAM GUIDE for generating one or more optional special electronic program guides (EPGs), also controlled by the SCHEDULER; a multiplexer (MUX) as shown, for multiplexing the studio data with the EPGs into a single TDM multiplexed stream; and a modulator (MODULATE) which in turn modulates the multiplexed composite stream onto a single carrier (channel) for transmitting via one of the plural transponders of a satellite (Figs. 1, 2).

It is noted that digital TV signal transmission formatting and broadcast system and technology was both known and “imminent” (lines 17-32 on page 2 and lines 1-5 on page 3 of the instant specification); and the known digital TV transmission format was a frequency and time division multiplexed format which carries digital data representing the various TV programming components, but which also carries data for other customer services such as “TV listings” (EPGs; noting again lines 25-32 on page 2 and lines 1-5 on page 3 of the specification).

It is also noted that the MASTER PROGRAM GUIDE comprises data that represents brief program listings for all of the channels; and was continuously transmitted as common “information data” within each of the channels (col. 5 lines 1-15 of Chaney). Therefore, the MASTER PROGRAM GUIDE data so described by Chaney not only comprises the

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“information data” recited in applicant’s claim 1, but also includes the specific structure and content that is recited in claim 2.

Chaney discloses a transmitter/receiver system for communicating A/V programming and auxiliary information. As was also discussed above, claims 1 and 2 differ from Chaney in that Chaney does not explicitly state that the master program guide information is overlaid on the displayed video signal.

Figs. 4 and 5 of Chaney show the receiver station for receiving the signals transmitted by the transmitting station. The receiving station includes antenna 5 and tuner/demodulator 6 for receiving and selecting one of the plural receivable channels which go through a decoding process carried out by the arrangement of elements 8, 17 and 22. The decoder operates on the selected channel for separating the information representing the master program guide from the compressed composite A/V data of the program that is to be viewed on the TV screen. More specifically, the master program guide “information data” is retained within buffer memory 15, whereas A/V data simultaneously passes on from the memory for further decompression/decoding processing (col. 8 lines 46-50 and 55-68; col. 9 lines 1-4 and 46-57; col. 11 lines 34-39 and lines 63-66).

The buffer memory stores/retains the master program guide information (col. 8 lines 55-61).

A viewable operator control device comprising an input device that controls the cursor that is used to select the master program guide information to be displayed on the screen of the receiver (e.g. col. 11 lines 35-40 and 63-65; input device 16 shown in Fig. 4).

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Signal processing arrangement comprising elements 17, 19 and 22 functions in response to the cursor selection of the master program guide information, to select and display the stored information obtained from memory 15 on the receiver screen.

**Applicant cites text in col. 9 lines 52-52 in Chaney to argue that the schedule guide occupies the entire screen, and therefore teaches away from simultaneous display with video imagery.**

**Applicant is directed to the immediately following text in col. 9 where Chaney points out that “*at other times when the video data is being decompressed, the OSD operates in a conventional fashion to overlay desired text material on video images.*” Although the previous situation describes otherwise, this language teaches the desirability of simultaneous display.**

Regarding claim 16, storage of the master program guide is periodically updated (col. 5 lines 9-10).

**Claims 1, 2 and 16 therefore remain rejected.**

Reiter is presented to show that it would have been desirable and therefore obvious to provide TV receivers with the capability to display program guide information overlaid on displayed video program (col. 1 lines 14-20). In view of this explicit teaching, it would therefore have been obvious to one of ordinary skill in the art to provide such an overlay feature in Chaney, for the clear benefit of providing the user with simultaneously presented information, as an assist to make programming decisions.

Likewise, Young teaches that it is desirable to overlay program guide information on video programming (col. 23 lines 35-50). In view of this explicit teaching, it would therefore

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have been obvious to one of ordinary skill in the art to provide such an overlay feature in Chaney, for the clear benefit of providing the user with simultaneously presented information, as an assist to make programming decisions.

**Applicant's new language regarding the varying of both the selected channel and information data in response to a viewer operation would have been clearly obvious to apply in Chaney by virtue of the fact that typical television controllers include individual respective interfaces for brightness, contrast, and color for the entire screen. Therefore any items displayed simultaneously will be varied in the same way and to the same degree. Such would have been obvious to one of ordinary skill in the art because each viewer is entitled to set viewing preferences on an individual basis per the viewers' tastes.**

**The separate option to vary only the selected information is that in Chaney that allows the user to manipulate the program guide alone (applicant makes references in Chaney to that effect).**

4. Claims 4, 6-8, 13, 14, 15, 17-19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chaney (5,473,609) in view Young (5,353,121 of record).

**Applicant does not argue the dependent claims on their own merits. They therefore stand rejected as previously presented and repeated as follows.**

As for claim 4, the master program guide information described in Chaney provides schedule information pertaining to many channels, over predetermined range of hours (e.g. col. 1 lines 28-32; col. 4 lines 24-35). As such, the scrolling of the master guide clearly includes selective display of (1) information pertaining to currently received A/V programming on that



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channel; (2) information pertaining to programming that can be received at some later time than the current time by the same channel; (3) information pertaining to programming currently received on other channels; and (4) information pertaining to programming that can be received at some later time from other channels.

As noted previously, Chaney not only operates to continuously receive the master program guide data (e.g. col. 5 lines 8-15) but also to occasionally receive one or more of the other more detailed or comprehensive "special" program guide data (e.g. col. 5 lines 15-30). Claim 6 differs from Chaney in that Chaney does not describe specific overlaying of the special program guide over the received video program, and further indicates that his receiver is unable to provide such an overlay given its limited processing power. However, Chaney recognizes that the limited processing power was a design choice driven by cost considerations (col. 8 lines 51-53; col. 9 lines 2-4), which is an express suggestion that overlaying such special guide data can in fact be carried out when such considerations are not applied.

As for claim 7, the data would be accessed from the memory by the viewer, and accordingly processed for eventual presentation.

Regarding claim 8, Chaney does not describe the usages of the program guides beyond the typical informing of current or upcoming broadcasts, it would have been obvious to provide alternative information useful in the presentation of programming, such as to program the operation of the receiver to tune in (or record) programming in response to data of the program guide being manipulated by the user, such providing a ready convenience, and as disclosed by Young.

As for claim 13, note col. 6 lines 33-44 and col. 11 lines 35-40 of Chaney.

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The subject matter recited in claim 14 is covered in full in col. 8 lines 32-37 of Chaney.

As for claim 15, the examiner takes Official notice that it was well known at the time of filing to have carried addressable messages as part of the services made available by digital (as well as analog) broadcasters (i.e. local, regional, and national alerts). It would have been obvious (if not required by law) to have been offered as part of the Chaney broadcasting network.

As for claims 17-19, Chaney discloses throughout his disclosure that his receiver is controlled by a software driven CPU, which therefore makes the receiver capable of being updated or otherwise modified (e.g. col. 11 lines 14-24). Therefore, it would have been obvious to use any suitable software equipment, such as well known CD ROMs, which were well known and readily available upgrade components at the time of filing.

As for claim 20, the user interface device 16 can be a remote control (col. 11 lines 24-32).

As for claims 21, the output element in Fig. 4 is connected to an A/V presentation device (not shown), which is integral with a television receiver.

5. Claims 9-12 **stand** rejected under 35 U.S.C. 103(a) as being unpatentable over Chaney (5,473,609) in view Young (5,353,121 **of record**), and in further view of Lawler (5,907,323) and/or Marshall (5,523,796), both also **of record**.

Although Chaney does not describe the inclusion of video clips as part of the program guide data, it would have been obvious to one of ordinary skill in the art to provide such an option, as taught by both Lawler and Marshall, for the benefit of enabling the viewer to preview available programming, of course under the user's control. Such preview data is in fact actual

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program data which is typically transmitted in MPEG format and stored for disassembly at the receiver for reproducing the video.

6. Claims 3 and 5 appear allowable over the prior art.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor R. Kostak whose telephone number is (571) 272-7348. The examiner can normally be reached on Monday - Friday from 6:30am-3:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David W. Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**Any response to this action should be mailed to:**

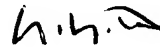
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**Or faxed to:**

**(571) 273-8300**

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Customer Service Office whose telephone number is (703) 308-HELP.



Victor R. Kostak  
Primary Examiner  
Art Unit 2622

VRK